

DOUBLING OF FARMERS INCOME BY INTRODUCING POMEGRANATE CULTIVATION IN NICRA VILLAGE (BHALOT) OF KUTCH DISTRICT (GUJ.)

U. N. Tank (P.I. NICRA Project, KVK, Kutch-I)
N. N. Patel (Co-P.I. NICRA Project, KVK, Kutch-I)

INTRODUCTION

Geographically Kutch is a largest District of Gujarat state. Adverse climatic variability is major constraint for sustainable agricultural income. Annual average rainfall is very low (338 mm) and erratic. Underground water is major source of irrigation. Salinity in irrigation water is increasing day by day due to sea water ingress in costal belt of the district. It resulted in reduction in productivity of regular traditional crops. Looking to this situation it is very necessary to find substitute of these cropping patter and crops. Now farmers diverted their farming under horticultural plantation with cultivation of major fruit crops like Mango, Date palm & Pomegranate.

Among all three fruit crops, Pomegranate crop had taken important place in respect of area and production in Kutch district. The area and production of pomegranate in Gujarat has expanded in the last decade. Gujarat ranks 3rd in area under cultivation and 4th in production of pomegranate in the country. Among all Districts of Gujarat now Kutch is leading district in cultivation of Pomegranate.

ABOUT NICRA VILLAGE

Bhalot village was adopted by Krishi Vigyan Kendra, Kutch-I for NICRA project work in Kutch district in 2011-12. Agriculture land of this village is sandy to sandy loam and is hilly and undulated. The source of irrigation water is open well. Irrigation from open well was limited during good rainfall year. Underground water quality of this village is not good enough with medium to high salinity i.e. 1000 to 3000 TDS. It was very difficult to grow and survive commercial crops like Bt. Cotton, Groundnut and Pulse crop like Green gram in this village during low and erratic rainfall. Failure of the crop was main constrain of this village.

INTERVENTION OF KVK IN NICRA VILLAGE BY INTRODUCING POMEGRANATE

- After implementation of the NICRA Project in Bhalot village, soil and water testing work was done by the Soil testing lab of KVK-Mundra, Kutch for two years and found high TDS in underground water. To mitigate this problem under NICRA Project KVK had started to recharge the open wells and underground aquifers by check dams, well recharge structures and installation of MIS under NRM module of NICRA.
- Subsequently it was also necessary to identify a proper crop which can sustain and grow in this condition and can also give good income to the farmers of NICRA village. As an intervention under crop production KVK Kutch-I had decided to introduce horticultural crops like Pomegranate and Date palm in this village.
- Farmers were initially promoted to cultivate Pomegranate crop with technical guidance. But no one is ready to come out from his traditional cropping method.
- During 2012-13 farmers were provided 10 plants of Pomegranate for border plantation to check their sustainability in their field and environmental condition.
- In next year 2013-14 under CP module of NICRA project KVK had started to promote the farmers by Rs. 6000/acre/farmer for systemic cultivation of Pomegranate.
- They were also linked with the Scheme of NHM of Department of Horticulture, Govt. of Gujarat.

IMPACT OF INTERVENTION

- In 2013-14 only one farmer Mr. Rameshbhai Arjanbhai Chavda of this village agreed for systemic cultivation Pomegranate in his 3 acres of land with 1350 plants with MIS. He got “Kalams” of Pomegranate from Satana of Maharashtra.
- After one year of plantation farmers meeting arranged on field of “Rameshbhai” and farmers were oriented for success of this farmer.
- In 2015-16 we received 12 farmers application for the plantation of Pomegranate in 61 acres of land. Total 27450 Tissue plants of Pomegranate were purchased and planted by the farmers of NICRA village.
- Now Mr. Rameshbhai is also a successful grower and supplier of Tissue plants of Pomegranate.

- Subsequently in 2016-17 other 12 farmers were planted Pomegranate in 38 acre of land with 17100 tissue plants.
- In 2017-18 journey of sowing of Pomegranate is continue with adoption of new village i.e. Lifra village of Mundra Taluka under NICRA project. This year in Bhalot village 4 farmers and in Lifra village 4 farmers were planted tissue culture plants of Pomegranate in 15 and 16 acres of land respectively.
- This year (2018-19) in Bhalot village 6 farmers have done plantation in 23 acre area with 10350 tissue culture plants without any support of NICRA project.
- As on today in Bhalot Village total 137 acres of land is covered with 61650 plants of Pomegranate.
- Farmers who made the plantation of pomegranate in 2013-14 and 2015-16 is now getting production with average 13 to 15 kg per plant and also having smart price up to Rs. 50 to 60 per Kg. fruits of Pomegranate.
- As per the record of farmers they are getting 5800 kg Production per acre and average Rs. 3.0 lakh per acre Gross income. After deduction of expenses per acre they are earning Rs. 2.3 lakh per acre as net income per year.
- Today due to large cultivation of this crop farmers have not to go anywhere to sell their fruits. Whole sale purchaser is coming to this village and procures all fruits with box packing.
- Within two year approximate annual income of farmers of NICRA village from Pomegranate will be around 3.00 cr.
- Looking to this success of intervention farmers of adjoining villages are also inspired to do this type of practices in their village and Krishi Vigyan Kendra-Kutch-I is still continue to increase the area under MIS and Pomegranate.
- Journey of no fruit crop plant to more than 100 acres of plantation of Pomegranate crop is real impact of the NICRA Project in this village.



Selection of Planting Material for Pomegranate Cultivation, Bhalot , Kutch-I



Planting of Pomegranate at farmers' field, Bhalot , Kutch-I



Field view of Pomegranate Farm, Bhalot , Kutch-I



**Field Visit of KVK Team in Pomegranate Farm,
Bhalot , Kutch-I**



Fruiting of Pomegranate, Bhalot , Kutch-I



**Use of IPM Module in Pomegranate
Bhalot , Kutch-I**



Video shooting of Pomegranate Cultivation by NICRA Team, Bhalot , Kutch-I



Visit of CRIDA Scientist Bhalot , Kutch-I



**Harvesting of Pomegranate fruits,
Bhalot , Kutch-I**



**Packaging for Marketing of Pomegranate fruits,
Bhalot , Kutch-I**